

ABSTRACT OF THE DISCLOSURE

A powder blend for use in laser sintering and a method for forming tough, strong, wear-resistant, corrosion-resistant infiltrated metal products are provided. The powder blend comprises a steel alloy, a polymeric binder and a high melting temperature fine particulate which are blended together, then applied layer by layer to a working surface in a laser sintering system, exposed a layer at a time to fuse together the powder until a green part of high strength is formed, and then the green part is infiltrated with a metal infiltrant in a non-reducing gas atmosphere at an effective temperature for an effective period of time. The preferred steel is a mild steel alloy.

10